

Amendments to the Specification:

Please replace paragraph [0019] with the following amended paragraph:

[0001] Electrode coating on optical glass substrate: As a first step in the fabrication process, an electrode coating is applied to the optical surface of the glass substrate 7 (Step B). Any conductive coating that is transparent at the wavelengths of interest can be used for this application. Indium tin oxide (ITO) is well-known and preferred. Optionally, as part of Step B, a layer of silicon dioxide (SiO₂) [[4]] 5 may be overlaid on top of the conductive coating 6, which improves its durability, surface wetting properties, and adhesion with sensor materials 4. The electrode coating covers the top surface, two opposite edges and side surfaces for electrical connection.

Please replace paragraph [0020] with the following amended paragraph:

[0002] 2) Sensor material coating: The sensor material 4 is then applied over the electrode 6 (and optional silicon dioxide layer [[7]] 5) (Step C). Any material with electro-optical response can be used. However, the preferred material includes polymer dispersed liquid crystal (PDLC), which is a gelatinous but potentially volatile liquid. Materials which are known to be suitable are designated as i) TL-205/AU1033; ii) TL-205/PMMA; ii) E7/poly(methyl methacrylate) (PMMA); and iv) E7/AU-1033. In the fabrication process, the following coating processes can be used: doctor blade, wired bar, slot die, spin, and meniscus. A process based on spin coating is preferred.

Please replace paragraph [0024] with the following amended paragraph:

[0003] Referring Figure 3, a suitable vacuum chamber 12 is depicted for use in the lamination process. The layers are exaggerated in height as depicted. The work-piece or EO sensor 10, comprising the glass block 7 with ITO layer 6, silicon dioxide layer 5, PDLC layer 4 and adhesive layer 3, is contained in the inner chamber 13, which is bounded by a positioning fixture

101 and which is in gas communication with a vacuum source 20. A pellicle 9 of dielectrically-coated polymer film [[9]] is mounted on an O-ring frame 24 and disposed to juxtapose the film 9 with the surface coated with the adhesive 3. The O-ring 24 may pinch the film 9 against posts of the fixture 101 with enough of a gap 22 to assure pressure equalization within the chamber. In the vacuum assisted process (Step F), the adjustment screws 16, 18 are automatically or manually advanced so that the adhesive layer 3 approaches the pellicle 9 and encounters it slightly off angle to the normal, so that only one side initially engages the pellicle. The block 7 is kept at this slight angle as it is pressed further against the stretchable pellicle 9, causing it to progressively engage the adhesive layer. The vacuum level, typically around one half atmosphere to about 0.8 atmosphere, and preferably about 0.75 atmosphere, prevents air bubbles from forming between the juxtaposed surfaces during lamination. The vacuum should not be so great as to cause excessive out gassing from volatile materials.